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(19) **United States**(12) **Patent Application Publication** (10) Pub. No.: **US 2003/0095612 A1**
Glas et al. (43) Pub. Date: **May 22, 2003**(54) **SYSTEM AND METHOD FOR AN
IF-SAMPLING TRANSCEIVER**

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The present invention is directed toward a radio, and method for receiving radio frequency signals. The radio comprises an input signal at a first intermediate frequency, an intermediate sampling architecture, a quantizer and a baseband converter. The intermediate frequency sampling architecture comprises receiving the input signal, passing the first intermediate frequency signal through a first filter characterized by steep selectivity and narrow bandpass, converting the filtered signal to a second intermediate frequency and passing the second intermediate frequency signal through a second filter having a bandpass characteristic, but without the steep selectivity characterizing the first filter. The radio further comprises a third filter following the baseband conversion which filters out adjacent channel harmonics to obtain a wanted data signal.

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